



The United Republic of Tanzania
Ministry of Livestock and Fisheries

Livestock and Fisheries Commodity Value Chain Briefs

Brief No. 1



BEEF

Key Message:

- Favorable investment within the beef subsector including investment in improved feed, animal health and the genetic pool has the potential to increase Tanzania's beef production by 50% in a span of 5 years.

SUMMARY STATISTICS

Number of livestock keepers	Annual production (Tons)	Per capita consumption (Kg)	Number of companies processing beef	Annual export (tons)	Annual export earnings (mil USD)	Annual import (tons)	Annual import bill (mil USD)
4,512,141 ¹	564,383 ²	15 ³	23 ³	181 ⁴		374 ⁴	

Source: NBS 2016¹, URT 2018b², URT 2018a³, URT 2019⁴

1. INTRODUCTION

Cattle production is a major economic and cultural activity in Tanzania. In terms of total national herd size, Tanzania has the second largest cattle population in Africa with 30.5 million cattle after Ethiopia (URT, 2018). This sub-sector employs almost a third of households in the country, an estimated 3 million households (NBS 2014, NBS 2017).

Tanzania produces an average of 363,707 tons of beef annually (TMB 2018). A significant portion of this production is predominantly for domestic consumption which stands at 350,000 annually. Beef imports are small around 700 tons, this is equivalent to about 10,000 to 14,000 head of cattle mainly to cater for a specific segment of consumers mainly expatriates and tourist hotels (Trevor 2015). Beef production in the country can be large categorised into two production systems, the large traditional production sector comprising of agro-pastoralist households which account for 80% of the production and pastoralist communities 14% and commercial producers (ranches and commercial farms) 6% (URT 2015).

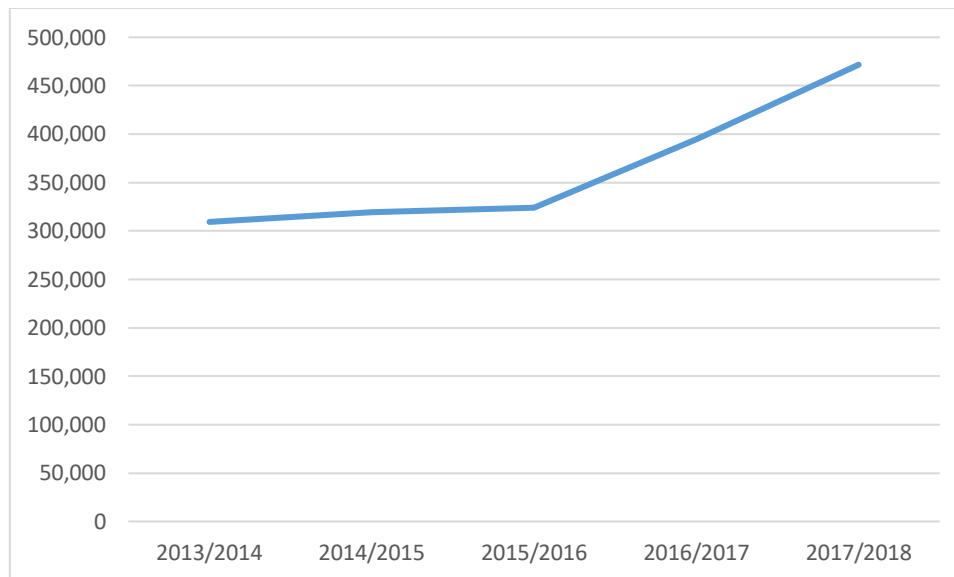
Extensive beef traditional production is concentrated in the Central regions (Manyara, Tabora, Singida and Dodoma; this zone contributes to about 43% of the total beef cattle production in the country. Other major beef producing areas are Coastal regions (Morogoro, Tanga, Coast and Dar es Salaam) and Lake zone regions (in Mara, Kagera, Shinyanga and Mwanza regions); producing around 40% and the Southern highlands regions (Mbeya, Iringa, Rukwa and Kigoma) contributing 16% (URT 2018b). A significant portion of the cattle ranching system is concentrated in the Southern highland producing over 50% of the total beef in the commercial production system.

2. PRODUCTION AND PRODUCTIVITY

Tanzania has experienced growth in beef production in recent years (Figure 2). Beef production in 2007 was 180,629 tons and in 2017/2018 the country produced 471,692 tons (URT 2018a, URT 2018b). Despite the recent gains in production growth, the production level remains lower than the potential because beef production is dominated by the traditional herd which has low productivity. The main breeds of beef cattle

in the country include: Tanzania Shorthorn Zebu (TSHZ) characterized by small size mature body weight (200–350 kg); Longhorn Cattle (LHC) such as the Ankole which is characterized by large matured body weight (500–730 kg); and the Boran which has a large body weight (500–800 kg) (URT 2018). Mature weight for a traditional cattle is about 200-300 kilograms while those in national commercial ranches (NARCO) are around 250-300 kilograms, these are 33% and 27 % less than the standard expected weight is 350-400 kilograms respectively (URT, 2010). Such disparities show that there is much potential if feed, health and breed improvements can be made.

Figure 1. Trends in Beef Production in Tanzania (2007-2015)



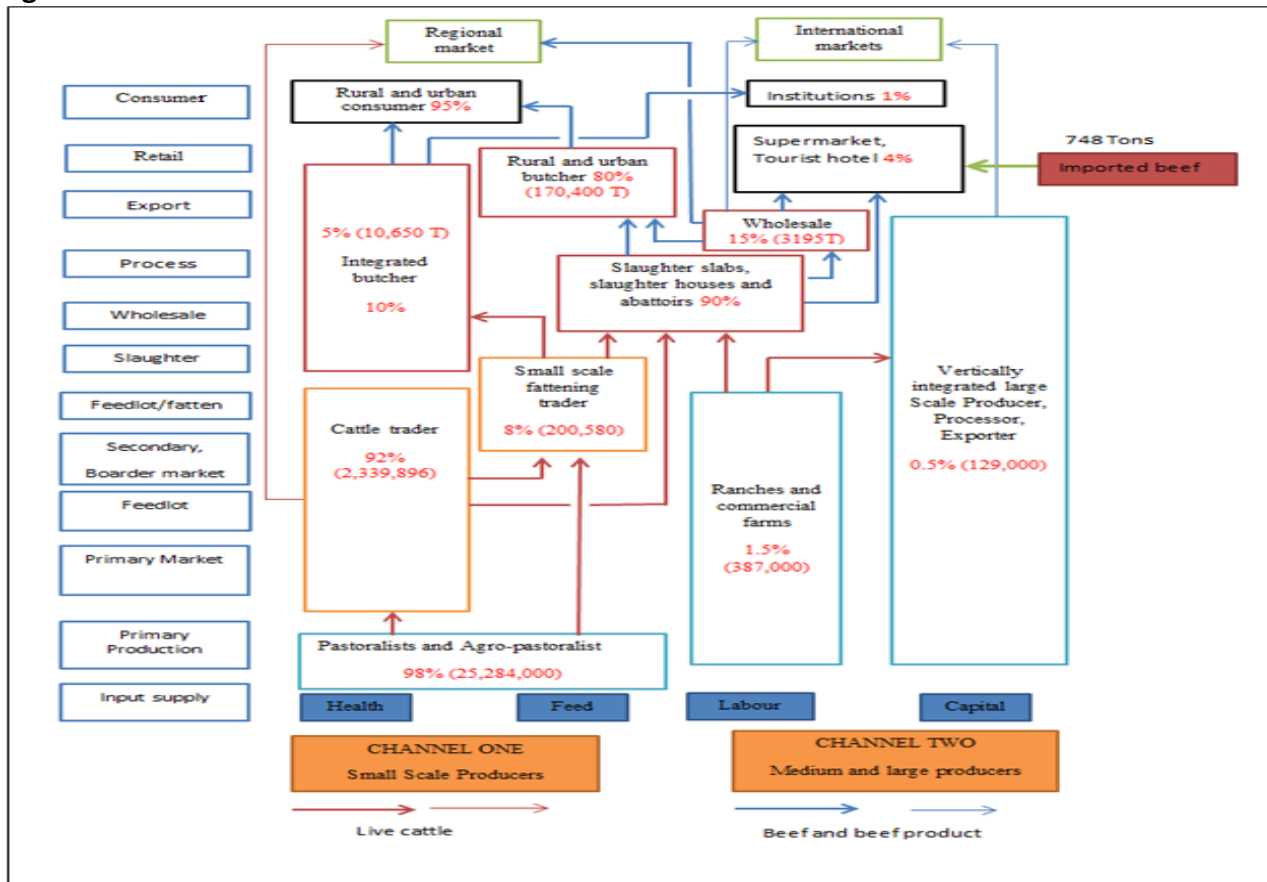
Source: Meat Board 2018

3. OVERVIEW OF THE BEEF VALUE CHAIN

Beef processing along the value chain from producer to consumer in Tanzania is largely a function of the production system. Traditional cattle producers mainly sell their animals to small-scale traders (accounting for 92%). These animals are typically slaughtered in local butcherries or exported to regional markets but they rarely find their way into formal retail markets. The remainder (8%) are sent for fattening on small-scale feedlots, and they are subsequently sold to local butcherries, wholesale markets, or hotels in some cases.

Commercial producers sell into formal market channels, including domestic supermarkets as well as the regional and international markets.

Figure 2. Beef Value Chain in Tanzania



Source: Trevor 2015

4. MARKETING, TRADE AND INVESTMENT OPPORTUNITIES

Tanzania’s demand for meat is expected to increase almost exponentially in the medium term, and will significantly outgrow that of other African countries due to the rapid growing population, increase urbanization and rising incomes. This offers good opportunities for livestock producers to increase production in order to serve a growing domestic.

Beef cattle export in Tanzania is mostly in the form of live animals while the amount of beef exported is negligible compared to the potential. Recent available data indicate that Tanzania exported around 181 tons of beef in 2019 (URT 2019). Most the exports for live animals and meat to foreign markets are destined for Dubai, Iraq, Comoro, Hong Kong and Vietnam (URT 2018a). The amount of beef exported is low because the export market requires high standards and quality which most local producers are not technically capable to meet. Most of the cattle slaughtering is carried out by small and medium-sized slaughter houses that lack capacity to adhere to quality standards. The final outlet (to the largely undiscerning consumer) is mostly through small one-man butcheries where the meat is usually sold warm and undifferentiated.

Tanzania imported around 374 tons of beef in 2018 from Kenya, South Africa, Belgium and UK (URT 2019). Imports are usually high quality processed meat products and special cuts. Most of these imports target the high-end niche markets including hotels, restaurants and expatriates.

There is an opportunity to increase commercially oriented production of quality beef to meet standards for the domestic and external markets. Feedlots or fattening pens have the potential for significant growth, and offer many opportunities for investment, especially for the high end markets. The size of this market can be equated to the amount of beef imports which is about 700 tons annually. Areas for investment in beef cattle industry include the following): i) Having joint ventures between the National Ranching Company (NARCO) and privately owned ranches to modernize the existing ranches; ii) Establishing new cattle ranches; iii) Investing in feed-lot programs; iv) Investing in feed fattening programs as well as in modern slaughtering facilities and processing plants (URT 2011b; TMB 2014).

Table 1. Meat Processing Plants in Tanzania

S/N	NAME	LOCATION	CAPACITY/DAY	STATUS
1	National Ranching Company (Abattoir)	Ruvu	Cattle 800	Under construction
2	Triple S Company	Shinyanga	Cattle 500 Cattle 700	Not working
3	Ali Allaba Company Ltd	Bagamoyo	Cattle 400	Under construction
			Goat and Sheep 3000	
4	Chobo Investment Ltd	Mwanza	Cattle 360	Working
			Goat and Sheep 400	
5	Arusha Meat Company	Arusha	Cattle 300,	Working
			Goat and Sheep 400	
6	Al Kafir Co. Ltd	Dodoma	Cattle 300	Working
			Goat and Sheep 3,000	
7	Fudar Enterprise Co	Dodoma	Cattle 200 Goat 1,000	Not working
8	S and Y Group Meat Co. Ltd	Dodoma	Cattle 200	Working
			Goat 1,000	
9	Ngelewala (Abattoir)	Iringa	Cattle 200,	Under construction
			Goat and sheep 200	
10	Nguru Hills Ranch	Mvomero	Cattle 150,	Under construction
			Goat and sheep 200,	

S/N	NAME	LOCATION	CAPACITY/DAY	STATUS
			Chicken 16,000	
11	SAAFI Ltd	Sumbawanga	Cattle 150, Goat and Sheep 150	Working
12	Alpha Choice LTD-Magu	Magu	Cattle 80	Working
13	Mtanga Farms Iringa	Iringa	Cattle 80	Working
14	Orpul Ltd	Simanjiro	Cattle 40, Goat and Sheep 40	Working
15	Peramiho	Songea	Cattle 40	Working
16	Meat King Ltd	Arusha	Cattle 7	Working
			Pigs 3	
17	Tandan Farms Iringa	Mkuranga	Pigs 100	Not working
18	Happy Sausage	Arusha	Pigs 100	Working
19	Brich Company Ltd	Ubungo DSM	Pigs 20	Working
20	Fan Hua Investment Co. Ltd	Shinyanga	Donkey 100	Working
21	Huacheng International Ltd	Dodoma	Donkey 40	Working
22	Zheng He International (T) Ltd	Temeke	Tonnes of offals 4	Working
23	GES Company Ltd	Kinondoni	Tonnes of meat 8	Working

5. CONSUMPTION

As shown in Figure 3, beef consumption in Tanzania declined through the 1990s and has only recently begun to improve. Despite this increase, current consumption levels remain much lower than the recommended amount of 50 kg per person per year. Per capita beef consumption in Tanzania is just over 15 kg. The low consumption levels could be attributed to the high poverty levels in the country and the high cost of beef. Many people cannot afford buying beef and other meat products as often as required. The situation is improving slowly as a result of urbanization and the growing middle income segment of the population. Based on Figure 3, it seems that beef supply per capita declined through the 1990s, probably due to deteriorating economic conditions. This trend began to reverse in 2007 as broader economic conditions improved, but levels remain below those achieved in the early 1990s. There are prospects that over time the current consumption levels will increase to reach recommended levels.

6. PROFITABILITY

Production of beef cattle is a profitable enterprise; the gross margin for feedlot operations can be as high as 14.3% after 3 years of operations (Trevor, 2015). The livestock keepers trading on beef cattle generate considerable margins for a range of outputs. This is because the usual major input cost — the base feed supply that is free range grazing — is ‘free’ to the user (although it comes at a severe cost to the wider community and to the environment) (Trevor, 2015). Gross margins for a producer of 5-year old cattle can be as high as 75 percent and for 3-year old cattle in the region of 66 percent (see Table 1).

Nonetheless, cattle business profit margins are lower than potential due to various constraints discussed above. Trevor (2015) notes that the major factors reducing beef cattle profit are: high costs of control, prevention and cure of animal diseases; paying for private extension agents; and animal feed (for fattening programs).

Table 1. Gross Margin Analyses for Primary Livestock Production for 5-Year Old

Item/ Costs	Cattle production (5 years, 300 Kg l.w.) (TSh)
Labour	20,000
Drugs/vaccination	50,000
Dipping	6,000
Trekking	20,000
Other	5,000
Total variable cost	101,000
Revenue	400,000
Gross margin	299,000

Source: ERB, 2009 cited by Trevor, 2015

7. DEVELOPMENT PARTNERS SUPPORTING THE VALUE CHAIN

The Government of Tanzania has been collaborating with development partners and the private sector to support the meat value chain in the country. Some of the recent programmes are:

- The United Nations Industrial Development Organization (UNIDO) and the International Fund for Agricultural Development (IFAD) supported various livestock interventions.
- The Bill and Melinda Gates Foundation and International Livestock Research Institute (ILRI) supported the preparation of the Tanzania Livestock Master Plan (2015-2016).
- The United States Agency for International Development (USAID) supported the Livestock Information Network Knowledge System (LINKS) which collected and disseminated livestock market information.

8. CHALLENGES

The beef cattle value chain is constrained by various challenges. The major constraints include the following:

- **Production level:**
 - i. **Feed:** Availability of quality animal feed is one of the major challenges to the livestock industry, animal feed sub sector is largely characterised by heavy dependence on rainfall in

feed production which largely unpredictable, lack of sufficient grazing areas to meet the feed needs of the animals, Poor-quality grazing land resources and limited knowledge among producers on the use of crop residues and by-products in feeds

- ii. **Genetics:** A significant number of cattle in the country are indigenous breeds who have low genetic potential consequently affecting the productivity of livestock in the country
 - iii. **Livestock management:** Livestock management is key in producing quality livestock product. The livestock subsectors in the country lacks an efficient extension system to cater for the producers. Available extension workers are not enough to cater for the demand in animal health extension services, the supply and quality of vaccines and drugs are largely inadequate.
- **Marketing and trade:** Processing of beef is currently inadequate, with six abattoirs in the country operating at 50% capacity while seven more abattoirs are under construction. Only 2% of produced beef is processed, with the remainder sold warm and undifferentiated (URT, 2015).
 - **Underdeveloped market infrastructure for livestock** (such as roads, water points, holding grounds etc.); unfavourable cross-border trade environment; limited access to market information; inadequate availability of standard abattoirs, slaughterhouses and meat processing facilities; weak trader organisation; tariff and non-tariff barriers to beef trade; and inadequate entrepreneurship and business skills.

9. OTHER MEATS

a. Goat

Goats are the second largest livestock population after cattle. There is an estimated 18.8 million goats in the country. Almost 90% of all goat meat is consumed locally with 10% being exported mostly to U.E.A (URT 2017). Live goat and goat meat for domestic and export market is sourced from four production zones Central, Coastal, Lake and Southern Highland.

b. Pork

In recent years, pork has become a popular street food delicacy in urban and semi urban areas. There are approximately 2 million pigs in the country of which 82% are reared by smallholder farmers. Pork recorded the second largest imports (in tonnage) for 2017 of around 506 tons (URT 2018a). Major producing zones include the Southern highlands with 58% of the production, the central zone 22% and the Coastal and Lake Zone 20%.

c. Donkey

Traditionally donkeys have been used as labor animals in the field for farming and carrying cargo. In the recent past, the value of donkeys has significantly increased, largely due to increased demand from China. The meat is now regarded a delicacy while its skin and hoof are heavily sought for medicinal purposes. Donkey meat exports increased from a mere 330 tons in 2015/16 to 2289 tons in 2016/17 registering over 100% increase.

10. POLICY ISSUES

- **Availability of quality feed has been a large setback for the growth of the beef value chain:** Supply of animal feed in the country, including concentrates and feed supplements has been unreliable; this is largely because there is limited land allocated for feed production also, in part due to a lack of quality control and standards, and enforcement mechanisms. Thus there is need to introduce policy that will identify and set aside land for investors in forage seed and production as well as promotion of the establishment of agro-industries whose by products can provide supplementary feed for livestock, similarly there is need to strengthen capacity in feed quality control authority to reach existing feed producers
- **The low genetics potential in indigenous cattle across the country is an obstacle the development of the beef subsector:** The low genetic potential in the country is largely the result of an inadequate national recording scheme. Proposed strategies to improve the country's genetic pool include; improvement of selection within indigenous breeds, establishment of community-based breeding programs, including the development of a national recording scheme, and promotion of a national animal identification and traceability scheme.
- **Inadequate investments in the management of animal health:** High levels of calf mortality and morbidity in Tanzania are aggravated by inefficient veterinary and animal health extension services, shortages of medicines, poor quality control of medicines and other supplies, and of biosafety in abattoirs, poor disease surveillance. It is important to look into strengthening of the animal health regulatory capacity at national and local levels
- **Formal beef marketing and processing is almost non-existence in the country:** The beef subsector in Tanzania is characterized by an absence of quality-based pricing systems, a lack of availability of market information and poor market infrastructure, hindering its development. The lack the necessary technical knowledge and infrastructure to meet quality standards, for instance in the fields of meat-cutting and grading. Thus there is need to development of the capacity of meat technology training staff, and the provision of training to meat processing staff; promotion of forward contracting by feedlots and abattoirs; investment in export infrastructure for animal holding and quarantine centres, as well as having strategies for disease surveillance, monitoring of abattoirs, animal identification and traceability.

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